IN THE CLAIMS

Please amend the claims as follows:

1. (Original) A method for manufacturing a single crystal semiconductor doped with an impurity by immersing a seed crystal in a melt within a crucible and pulling the seed crystal while rotating the same, characterized in that:

in the course of pulling the single crystal semiconductor, a rotating velocity of the single crystal semiconductor being pulled is adjusted to a predetermined value or higher and a magnetic field having a strength in a predetermined range is applied to the melt.

2. (Original) A method for manufacturing a single crystal semiconductor doped with an impurity by immersing a seed crystal in a melt within a crucible and pulling the seed crystal while rotating the same, characterized in that:

in the course of pulling the single crystal semiconductor, a peripheral velocity at the outer periphery of the single crystal semiconductor being pulled is adjusted to 0.126 m/sec or higher, and a magnetic field is applied to the melt to satisfy the condition:

$$35.5 \leq M/V^{1/3} \leq 61.3$$

where M denotes a magnetic field strength at the bottom of the crucible, and V denotes a volume of the melt within the crucible.

3. (Original) A method for manufacturing a single crystal semiconductor doped with an impurity by immersing a seed crystal in a melt within a crucible and pulling the seed crystal while rotating the same, characterized in that:

in the course of pulling the single crystal semiconductor, a peripheral velocity at the outer periphery of the single crystal semiconductor being pulled is adjusted to 0.126 m/sec or higher.

4. (Original) A method for manufacturing a single crystal semiconductor doped with an impurity by immersing a seed crystal in a melt within a crucible and pulling the seed crystal while rotating the same, characterized in that:

a magnetic field is applied to the melt to satisfy the condition:

$35.5 \leq M/V^{1/3} \leq 61.3$

where M denotes a magnetic field strength at the bottom of the crucible, and V denotes a volume of the melt within the crucible.

5. (Original) A method for manufacturing a single crystal semiconductor doped with an impurity by immersing a seed crystal in a melt within a crucible and pulling the seed crystal while rotating the same, characterized in that:

in the course of pulling the single crystal semiconductor, a peripheral velocity at the outer periphery of the single crystal semiconductor being pulled is adjusted to 0.141 m/sec or higher, and a magnetic field is applied to the melt to satisfy the condition:

$40.3 \leq M/V^{1/3} \leq 56.4$

where M denotes a magnetic field strength at the bottom of the crucible, and V denotes a volume of the melt within the crucible.

6. (Original) A method for manufacturing a single crystal semiconductor doped with an impurity by immersing a seed crystal in a melt within a crucible and pulling the seed crystal while rotating the same, characterized in that:

in the course of pulling the single crystal semiconductor, a peripheral velocity at the outer periphery of the single crystal semiconductor being pulled is adjusted to 0.141 m/sec or higher.

7. (Original) A method for manufacturing a single crystal semiconductor doped with an impurity by immersing a seed crystal in a melt within a crucible and pulling the seed crystal while rotating the same, characterized in that:

a magnetic field is applied to the melt to satisfy the condition:

$40.3 \leq M/V^{1/3} \leq 56.4$

where M denotes a magnetic field strength at the bottom of the crucible, and V denotes a volume of the melt within the crucible.

8. (Presently amended) The method for manufacturing a single crystal semiconductor according to Claim~~s~~ 1 ~~to 7~~, characterized in that the impurity added to the single crystal semiconductor is boron B or gallium Ga, the impurity concentration being 8.0E17 atoms/cc or higher.

9. (Presently amended) The method for manufacturing a single crystal semiconductor according to Claim~~s~~ 1 ~~to 7~~, characterized in that the impurity added to the single crystal semiconductor is phosphorus P or antimony Sb or arsenic As, the impurity concentration being 5.0E17 atoms/cc or higher.

10. (New) The method for manufacturing a single crystal semiconductor according to Claim 2, characterized in that the impurity added to the single crystal semiconductor is boron B or gallium Ga, the impurity concentration being 8.0E17 atoms/cc or higher.

11. (New) The method for manufacturing a single crystal semiconductor according to Claim 2, characterized in that the impurity added to the single crystal semiconductor is phosphorus P or antimony Sb or arsenic As, the impurity concentration being 5.0E17 atoms/cc or higher.

12. (New) The method for manufacturing a single crystal semiconductor according to Claim 3, characterized in that the impurity added to the single crystal semiconductor is boron B or gallium Ga, the impurity concentration being 8.0E17 atoms/cc or higher.

13. (New) The method for manufacturing a single crystal semiconductor according to Claim 3, characterized in that the impurity added to the single crystal semiconductor is phosphorus P or antimony Sb or arsenic As, the impurity concentration being 5.0E17 atoms/cc or higher.

14. (New) The method for manufacturing a single crystal semiconductor according to Claim 4, characterized in that the impurity added to the single crystal semiconductor is boron B or gallium Ga, the impurity concentration being 8.0E17 atoms/cc or higher.

15. (New) The method for manufacturing a single crystal semiconductor according to Claim 4, characterized in that the impurity added to the single crystal semiconductor is phosphorus P or antimony Sb or arsenic As, the impurity concentration being 5.0E17 atoms/cc or higher.

16. (New) The method for manufacturing a single crystal semiconductor according to Claim 5, characterized in that the impurity added to the single crystal semiconductor is boron B or gallium Ga, the impurity concentration being 8.0E17 atoms/cc or higher.

17. (New) The method for manufacturing a single crystal semiconductor according to Claim 5, characterized in that the impurity added to the single crystal semiconductor is phosphorus P or antimony Sb or arsenic As, the impurity concentration being 5.0E17 atoms/cc or higher.

18. (New) The method for manufacturing a single crystal semiconductor according to Claim 6, characterized in that the impurity added to the single crystal semiconductor is boron B or gallium Ga, the impurity concentration being 8.0E17 atoms/cc or higher.

19. (New) The method for manufacturing a single crystal semiconductor according to Claim 6, characterized in that the impurity added to the single crystal semiconductor is phosphorus P or antimony Sb or arsenic As, the impurity concentration being 5.0E17 atoms/cc or higher.

20. (New) The method for manufacturing a single crystal semiconductor according to Claim 7, characterized in that the impurity added to the single crystal semiconductor is boron B or gallium Ga, the impurity concentration being 8.0E17 atoms/cc or higher.

21. (New) The method for manufacturing a single crystal semiconductor according to Claim 7, characterized in that the impurity added to the single crystal semiconductor is phosphorus P or antimony Sb or arsenic As, the impurity concentration being 5.0E17 atoms/cc or higher.

Respectfully submitted,
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